



MATERIAL SAFETY DATA SHEET

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CHEMTREC (outside U.S.): 1-703-527-3887
Phone Number: 1-315-536-3357

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: 4520 Ce-Rite® 20 Kg Pail **Date of Preparation:** 11/21/2011
Synonym: Rare Earth Polishing Compound.
CAS-No.: Mixture
Product Code: 1014718

2. HAZARDS IDENTIFICATION

Emergency Overview

Caution
Avoid dust formation. May cause respiratory tract, eye and skin irritation.

		HMIS	NFPA 704
Color:	Red brown	1*	1
Physical state:	Powder	0	0
Odor:	Odorless	0	0
		X	

Potential Health Effects

Principle routes of exposure: Inhalation. Ingestion.
Eye contact: May cause irritation.
Skin contact: Prolonged skin contact may cause skin irritation and/or dermatitis.
Inhalation: Dust irritating to respiratory tract.
Ingestion: May irritate digestive tract.
Chronic toxicity: Repeated or prolonged exposure to the substance can produce lung damage.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %
Rare Earth Oxide		50 - 60%
Kaolin	1332-58-7	20 - 30%
Rare Earth Fluoride		10 - 20%
Zinc sulfate	7733-02-0	5 - 10%

Rare Earth Oxide is a mixture of Cerium Oxide (1306-38-3), Lanthanum Oxide (1312-81-8), Praseodymium Oxide (12037-29-5), and Neodymium Oxide (1313-97-9). Rare Earth Fluoride is a mixture of Cerium Fluoride (7758-88-5) and Lanthanum Fluoride (13709-38-1). This material contains very low levels of Naturally Occurring Radioactive Material (NORM).

4. FIRST AID MEASURES

Eye contact: Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops.
Skin contact: Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion: Drink plenty of water. Do not induce vomiting. Consult a physician if necessary.

Notes to physician: Treat symptomatically. Lanthanides, because of their high density, can produce abnormalities on chest x-ray. Lanthanides, generally are not felt to be fibrogenic and the lesions typically have little or no clinical significance. However, occasional cases of pneumoconiosis have been reported.

5. FIRE-FIGHTING MEASURES

Flash point (°C): Non combustible

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous decomposition products: None reasonably foreseeable.

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus (pressure-demand, NIOSH approved or equivalent) and full protective gear.

Unusual hazards: None known.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid dust formation. Evacuate area of all unnecessary personnel. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up: Wear personal protective equipment. Clean up promptly by scoop or vacuum. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid contact with skin, eyes and clothing. Wash hands thoroughly before eating, drinking or smoking.

Storage: Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

Minimize exposure in accordance with good hygiene practice

Components	OSHA	ACGIH
Rare Earth Oxide	15 mg/m ³ Total; 5 mg/m ³ Respirable	10 mg/m ³ Total; 3 mg/m ³ Respirable
Kaolin	15 mg/m ³ TWA total dust 5 mg/m ³ TWA respirable fraction	2 mg/m ³ TWA particulate matter containing no asbestos and <1% crystalline silica, respirable fraction
Rare Earth Fluoride	2.5 mg/m ³ TWA F	2.5 mg/m ³ TWA F

Engineering measures: Provide appropriate exhaust ventilation at machinery and at places where dust or fumes can be generated.

Eye protection: Safety glasses with side-shields.

Skin and body protection: Lightweight protective clothing.

Hand protection: Impervious gloves.

Respiratory protection: Use NIOSH approved respirator when ventilation is inadequate. Wear NIOSH approved respirator to limit exposure to NORM.

Hygiene measures: Wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	Red brown	Physical state:	Powder
Odor:	Odorless	Molecular weight:	No data available
Boiling point/range (°C):	No data available	pH:	No data available
Melting point/range (°C):	> 2300	Specific gravity (Water =1):	5.4
Vapor pressure :	No data available	Water solubility:	Insoluble
VOC content (%)	0		

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Polymerization Will not occur.

Hazardous decomposition products: None under normal use.

Materials to avoid: Strong acids.

Conditions to avoid None known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Information given is based on data on the components and the toxicology of similar products

Target Organ Effects: Aluminum silicate (Kaolin): Respiratory system.

Component information, if any, is listed below

Rare Earth Oxide

LD50s and LC50s: Oral LD50 (Rat) = 5 g/kg

Zinc sulfate

LD50s and LC50s: Oral LD50 (Rat) = 500 mg/kg

12. ECOLOGICAL INFORMATION

Aquatic toxicity: Information given is based on data on the components and the ecotoxicology of similar products.

Zinc sulfate

Ecotoxicity - Fish Species Data:

96 h LC50 (Oncorhynchus mykiss) = 0.03 - 0.05 mg/L semi-static
96 h LC50 (Pimephales promelas) = 0.168 - 0.25 mg/L semi-static
96 h LC50 (Pimephales promelas) = 0.218 - 0.42 mg/L flow-through
96 h LC50 (Pimephales promelas) = 0.23 - 0.48 mg/L
96 h LC50 (Oncorhynchus mykiss) = 0.34 - 0.93 mg/L static
96 h LC50 (Poecilia reticulata) = 0.48 - 1.72 mg/L static
96 h LC50 (Cyprinus carpio) = 16.85 - 27.18 mg/L static
96 h LC50 (Lepomis macrochirus) = 3 - 4.6 mg/L flow-through
96 h LC50 (Lepomis macrochirus) = 3.55 - 6.32 mg/L static
96 h LC50 (Poecilia reticulata) = 49.23 - 64.16 mg/L semi-static
96 h LC50 (Pimephales promelas) = 0.06 mg/L static
96 h LC50 (Cyprinus carpio) = 0.15 mg/L semi-static
96 h LC50 (Oncorhynchus mykiss) = 0.162 mg/L flow-through
96 h LC50 (Poecilia reticulata) = 0.63 mg/L

Ecotoxicity - Water Flea Data:

48 h EC50 (Daphnia magna) = 0.538 - 0.908 mg/L Static
48 h EC50 (Daphnia magna) = 0.75 mg/L

Ecotoxicity - Freshwater Algae Data:

72 h EC50 (Pseudokirchneriella subcapitata) = 0.056 mg/L static
96 h EC50 (Chlorella vulgaris) = 2.4 mg/L
72 h EC50 (Chlorella vulgaris) = 64.8 mg/L

Persistence and degradability: Not determined

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Where possible recycling is preferred to disposal or incineration. This product contains Naturally Occurring Radioactive Materials (NORM). Consult and comply with current regulations.

14. TRANSPORT INFORMATION

DOT (U.S.)

Proper shipping name: Not regulated.

TDG (Canada)

Proper shipping name: Not regulated.

15. REGULATORY INFORMATION

U.S. Regulations:

TSCA: Not subject to TSCA 12(b) Export Notification

SARA 313:

Components	U.S. - CERCLA/SARA - Section 313 - Emission Reporting
Zinc compounds (5 - 10%)	1.0 % de minimis concentration

State Regulations

This product or its ingredients have been evaluated for New Jersey, Pennsylvania, and California Prop 65 supplier notification requirements. Substances that are subject to notification requirements, if any, are listed below.

Components	PARTK:
Zinc compounds	Listed (PARTK)

Components	NJRTK:
Kaolin	Listed (NJRTK)
Zinc compounds	Listed (NJRTK)

Components	State Regulation - CA Prop65
Rare Earth Oxide	Radionuclides
Rare Earth Fluoride	Radionuclides
Formaldehyde	Carcinogen

Canadian WHMIS

WHMIS hazard class: D2A Very toxic materials

Canadian Ingredient Disclosure List (IDL):

Components	Canada - WHMIS Ingredient Disclosure:
Zinc sulfate	1

International Inventories

TSCA 8(b):	Listed or exempt.
Canadian DSL/NDSL list	All ingredient(s) are listed on the DSL or NDSL
EC-No.	One or more ingredient(s) are not on the EINECS list.
Philippines (PICCS):	Listed.
Japan (ENCS):	Listed or exempt.
Korea (KECL):	Listed.
China (IECS):	Listed.
Australia (AICS):	One or more ingredient(s) are not on the AICS list.
New Zealand (NZIoC):	One or more ingredient(s) are not on the NZIoC list.

16. OTHER INFORMATION

For Industrial Use Only

Prepared by: Ferro Technical Center

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

End of Safety Data Sheet